

Ode to E Pluribus Unum for Sunday June 2 2024

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Perijove 16: Passing Jupiter



Video Credit & License: NASA, Juno, SwRI, MSSS, Gerald Eichstadt;

[Watch Juno zoom past Jupiter.](#)

Music: The Planets, IV. Jupiter (Gustav Holst); USAF Heritage of America Band (via Wikipedia)

NASA's robotic spacecraft Juno is continuing on its now month-long, highly elongated orbits around our Solar System's largest planet. The featured video is from [perijove](#) 16, the sixteenth time that Juno passed near Jupiter since it arrived in mid-2016. Each perijove passes near a slightly different part of Jupiter's cloud tops.

This color-enhanced video has been digitally composed from 21 JunoCam still images, resulting in a 125-fold time-lapse. The video begins with Jupiter rising as Juno approaches from the north. As Juno reaches its closest view -- from about 3,500 kilometers over Jupiter's cloud tops -- the spacecraft captures the great planet in tremendous detail.

Juno passes light zones and dark belts of clouds that circle the planet, as well as numerous swirling circular storms, many of which are larger than hurricanes on Earth. As Juno moves away, the remarkable dolphin-shaped cloud is visible.

After the perijove, Jupiter recedes into the distance, now displaying the unusual clouds that appear over Jupiter's south. To get desired science data, Juno swoops so close to Jupiter that its instruments are exposed to very high levels of radiation.

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Desert Tortoise 101 - Everything You Need to Know



David McNew/Getty Images

Tortoises living in a 3.5 million-acre area of California's Mojave Desert will soon receive greater protections thanks to a new partnership that includes state, local, and federal government agencies, conservation groups, military organizations, and more.

The tortoises in the Mojave are vulnerable to car collisions, human development, drought, and predators like coyotes and ravens. Phil Murray, an encroachment manager for the Marine Corps Air Ground Combat Center in Twentynine Palms, said the new coalition will address these threats, including by building fencing and wildlife crossings and rehabilitating the reptiles' habitat.

<https://youtu.be/u7FjFJjKxrw>

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All About the NHL's Inaugural "Stanley Pup" Competition

Rescue dogs are hitting the rink! For the first time, the NHL is hosting a wholesome hockey competition that gives canines in need of fur-ever homes the chance to show



off their skills and catch the eyes of potential adopters. Aptly named the Stanley Pup, it will be broadcast the day before the Stanley Cup Final is slated to begin.

"The show is sure to be the biggest night of the year for dog-loving hockey fans," creator and producer Michael Levitt said in a statement. "The cuteness overload is going to be off the charts! I can't wait to

show viewers how special rescue dogs are and how profoundly they enhance our lives when we welcome them into our families."

During the hourlong special, held in partnership with Petco Love, 16 pups will represent the 2024 playoff teams. The show will also feature special appearances by well-known dog lovers, including Kristin Chenoweth and Miranda Lambert.

It will air on the NHL Network and ESPN+ on **Friday, June 7, at 8 p.m. ET**. [Get to know some of the dogs](#) participating in the inaugural competition and take a peek at them in action.

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Mycenaean Armor Protected Users in a Battle Simulation



Researchers recruited volunteers from the Hellenic Armed Forces to test the strength of replicas of 3,500-year-old body armor.

Researchers took a suit of armor found in 1960 by archaeologists in Dendra, a village located near what was once the ancient Greek city of Mycenae, and recruited 13 soldiers from the marines of the Hellenic Armed Forces to test the artifact's mettle, according to a study published May 22 in the journal PLOS One.

"Since its discovery, the question has remained as to whether the armor was purely for ceremonial purposes, or for use in battle,"

lead study author Andreas Flouris, a professor of physiology at the University of Thessaly in Greece, and his colleagues told Live Science in an email. "The Dendra armor is considered one of the oldest complete suits of armor from the European Bronze Age."

<https://bit.ly/3VcuLER>

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Virtual Tour of the Giza Pyramids



*Great Pyramid of Giza
Virtual Tour Momentum 360
momentumvirtualtours.com*

Researchers at the University of North Carolina Wilmington have detected a long-buried branch of the Nile River that may have been used for transporting construction materials. To

confirm the branch's location, the team relied on geophysical surveys, sediment samples, and satellite remote sensing, the last of which provided the "unique ability to penetrate the ground and produce images of hidden paleo-rivers and structures," according to the study.

https://youtu.be/Pz97_oTOqo?t=4

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"Yeah, but the one in Vegas has an endless shrimp buffet."

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'More Neanderthal Than Human'



Neanderthals and humans interbred at several points in our evolutionary history. The traces of these ancient interactions linger in our genes today.

(Image credit: Kevin McGivern for Live Science)

How your health may depend on DNA from our long-lost ancestors

By 75,000 years ago, but possibly up to 250,000 years ago, the ancestors of most modern Eurasians first ventured out of Africa and into Eurasia. Here, modern humans came face-to-face with Neanderthals, who last shared a common ancestor with modern humans hundreds of thousands of years earlier and had been living in these continents

ever since. On multiple occasions over the millennia, the groups interbred.

Some Neanderthal DNA helped modern humans survive and reproduce, and thus it has lingered in our genomes. Nowadays, Neanderthal DNA occupies, on average, 2% of the genomes of people outside Africa. However, the frequency of Neanderthal DNA that codes for beneficial traits may be as high as 80% in some regions of the genome

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Face of 75,000-Year-Old Female Neanderthal from Burial Cave



University of Cambridge; BBC Studios/Jamie Simonds)

A new documentary has recreated the face of a 75,000-year-old female Neanderthal whose flattened skull was discovered and rebuilt from hundreds of bone fragments by a team of archaeologists and conservators led by the University of Cambridge.

"We can see that Neanderthals are coming back to one particular spot to bury their dead. This could be decades or even thousands of years apart. Is it just a coincidence, or is it intentional, and if so what brings them back?"

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71 Beautiful Streets Around the World



San Miguel De Allende, Mexico

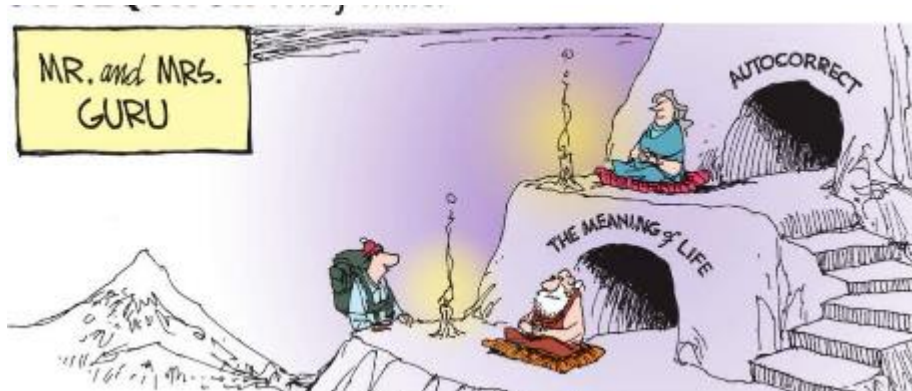
Photo: Getty Images/tdphostock

Between beautiful streets, stunning road trips, and mesmerizing train rides, there's something to be said for taking the scenic route. Not only do these experiences make for an exciting journey, but they remind us that good, beautiful things are all around us—so long as we take the time to find them.

When it comes to streets, it goes without saying that not all are created equal. Take your basic grass-lined passageway and compare it to the colorful Caminito that anchors the La Boca neighborhood in Buenos Aires: The latter not only provides visitors with a vibrant photo op, but also serves as a reminder of the neighborhood's 19th-century origins.

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Poetry Corner

John Keats (1795-1821)



A member of England's second generation of Romantic poets that included Byron and Shelley, Keats did not achieve recognition during his lifetime—he died of tuberculosis at the age of 25. His influence, however, grew throughout the 19th Century, paced by his Odes. Ode to a Nightingale, Ode on a Grecian Urn, Sleep and Poetry, and the sonnet On First Looking into Chapman's Homer exemplify his works.

Ode on a Grecian Urn

Thou still unravish'd bride of quietness!
Thou foster-child of Silence and slow Time,
Sylvan historian, who canst thus express
A flowery tale more sweetly than our rhyme:
What leaf-fringed legend haunts about thy shape
Of deities or mortals, or of both,
In Tempe or the dales of Arcady?
What men or gods are these? what maidens loath?
What mad pursuit? What struggle to escape?
What pipes and timbrels? What wild ecstasy?

Heard melodies are sweet, but those unheard
Are sweeter; therefore, ye soft pipes, play on;
Not to the sensual ear, but, more endear'd,
Pipe to the spirit ditties of no tone:
Fair youth, beneath the trees, thou canst not leave
Thy song, nor ever can those trees be bare;
Bold Lover, never, never canst thou kiss,
Though winning near the goal—yet, do not grieve;
She cannot fade, though thou hast not thy bliss,
Forever wilt thou love, and she be fair!

Ah, happy, happy boughs! that cannot shed
Your leaves, nor ever bid the Spring adieu;
And, happy melodist, unwearied,
For ever piping songs for ever new;
More happy love! more happy, happy love!
For ever warm and still to be enjoy'd,
For ever panting, and for ever young;
All breathing human passion far above,
That leaves a heart high-sorrowful and cloy'd,
A burning forehead, and a parching tongue.

Who are these coming to the sacrifice?
To what green altar, O mysterious priest,
Lead'st thou that heifer lowing at the skies,
And all her silken flanks with garlands drest?
What little town by river or sea shore,
Or mountain-built with peaceful citadel,
Is emptied of this folk, this pious morn?
And, little town, thy streets for evermore
Will silent be; and not a soul to tell
Why thou art desolate, can e'er return.

O Attic shape! Fair attitude! with brede
Of marble men and maidens overwrought,
With forest branches and the trodden weed;
Thou, silent form, dost tease us out of thought
As doth eternity: Cold Pastoral!
When old age shall this generation waste,
Thou shalt remain, in midst of other woe
Than ours, a friend to man, to whom thou say'st,
"Beauty is truth, truth beauty,—that is all
Ye know on earth, and all ye need to know."

Ode to a Nightingale

My heart aches, and a drowsy numbness pains
My sense, as though of hemlock I had drunk,
Or emptied some dull opiate to the drains
One minute past, and Lethe-wards had sunk:
'Tis not through envy of thy happy lot,
But being too happy in thine happiness,—
That thou, light-winged Dryad of the trees
In some melodious plot
Of beechen green, and shadows numberless,

Singest of summer in full-throated ease.

O, for a draught of vintage! that hath been
Cool'd a long age in the deep-delved earth,
Tasting of Flora and the country green,
Dance, and Provençal song, and sunburnt mirth!
O for a beaker full of the warm South,
Full of the true, the blushful Hippocrene,
With beaded bubbles winking at the brim,
And purple-stained mouth;
That I might drink, and leave the world unseen,
And with thee fade away into the forest dim:

Fade far away, dissolve, and quite forget
What thou among the leaves hast never known,
The weariness, the fever, and the fret
Here, where men sit and hear each other groan;
Where palsy shakes a few, sad, last gray hairs,
Where youth grows pale, and spectre-thin, and dies;
Where but to think is to be full of sorrow
And leaden-eyed despairs,
Where Beauty cannot keep her lustrous eyes,
Or new Love pine at them beyond to-morrow.

Away! away! for I will fly to thee,
Not charioted by Bacchus and his pards,
But on the viewless wings of Poesy,
Though the dull brain perplexes and retards:
Already with thee! tender is the night,
And haply the Queen-Moon is on her throne,
Cluster'd around by all her starry Fays;
But here there is no light,
Save what from heaven is with the breezes blown
Through verdurous glooms and winding mossy ways.

I cannot see what flowers are at my feet,
Nor what soft incense hangs upon the boughs,
But, in embalmed darkness, guess each sweet
Wherewith the seasonable month endows
The grass, the thicket, and the fruit-tree wild;
White hawthorn, and the pastoral eglantine;
Fast fading violets cover'd up in leaves;

And mid-May's eldest child,
The coming musk-rose, full of dewy wine,
The murmurous haunt of flies on summer eves.

Darkling I listen; and, for many a time
I have been half in love with easeful Death,
Call'd him soft names in many a mused rhyme,
To take into the air my quiet breath;
Now more than ever seems it rich to die,
To cease upon the midnight with no pain,
While thou art pouring forth thy soul abroad
In such an ecstasy!
Still wouldst thou sing, and I have ears in vain—
To thy high requiem become a sod.

Thou wast not born for death, immortal Bird!
No hungry generations tread thee down;
The voice I hear this passing night was heard
In ancient days by emperor and clown:
Perhaps the self-same song that found a path
Through the sad heart of Ruth, when, sick for home,
She stood in tears amid the alien corn;
The same that oft-times hath
Charm'd magic casements, opening on the foam
Of perilous seas, in faery lands forlorn.

Forlorn! the very word is like a bell
To toll me back from thee to my sole self!
Adieu! the fancy cannot cheat so well
As she is fam'd to do, deceiving elf.
Adieu! adieu! thy plaintive anthem fades
Past the near meadows, over the still stream,
Up the hill-side; and now 'tis buried deep
In the next valley-glades:
Was it a vision, or a waking dream?
Fled is that music:—Do I wake or sleep?

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The Honeybee Population Is Making a Comeback



PetrBonek/ iStock

Honeybees are making a buzz in the headlines, as data from the Census of Agriculture shows that the U.S. added nearly 1 million bee colonies between 2017 and 2022. That boosts the total number of colonies to an all-time high of 3.8 million, CBS News reports.

However, things were looking much different for the insects not too long ago. In the mid-2000s, news spread that bee populations — and the ecosystems they support — were declining rapidly due to pesticides, climate change, and habitat destruction, among other factors. It was around then that conservationists began the rallying cry to “save the bees.” Luckily, that seems to be working, as honeybees are now the fastest-growing livestock segment in the country.

Still, this good news doesn’t mean it’s time to pull back. Mace Vaughan, an insect conservationist, previously told *The Washington Post* the best way to help pollinators is to “go out there and create beautiful flower-rich [habitats] on your farm or your garden.” [Learn how.](#)

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Wonderfully Colorful Caterpillars Photographed by Samuel Jaffe



Images © Copyright Samuel Jaffe. Via Colossal:

The star of one of nature's most incredible transformations, the caterpillar is a fascinating creature. The larval stage of the Lepidoptera creature, caterpillars have nearly 180,000 known species. This means that caterpillars take all manner of shapes, sizes, colors, and patterns.

<https://bit.ly/44So0v6>

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Rare Deep-Sea Squid Dazzles and Glows

This footage is very special as Dana octopus squid are typically only seen in the bellies of whales.

Rare footage of a live Dana octopus squid (Taningia danae) filmed around the Nova Canton Trough in the Central Pacific Ocean.

Image courtesy of University of Western Australia



As it descends towards the camera, the huge sea beast flashes its bioluminescent arm in an attempt to dazzle its target before grappling with the device. The squid seems to realize the gadget isn't prey and quickly scuttles off into the dark.

The squid's bioluminescence is created by photophores, a specialized light-producing organ found in an array of organisms, most notably in deep-sea creatures.

<https://bit.ly/4bLMYz2>

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Hims Debuts \$199 Weight-Loss Shots at 85% Discount to Wegovy



Hims & Hers

In just a few years, Hims & Hers Health Inc. reached almost \$1 billion in sales by making it easy to buy cheap, generic versions of popular drugs such as Viagra. Now it's using that playbook to jump into the hottest part of health-care: weight-loss shots.

And in typical fashion, a big part of the company's pitch is the discount. Wegovy, made by Novo Nordisk A/S, costs roughly \$1,350 for a month of injections without insurance, and Eli Lilly & Co.'s Zepbound is similarly priced. Hims said it's offering a treatment with the same active ingredient as Wegovy for \$199 a month. That undercuts big pharma by as much as 85%. Wegovy copycat drug made by undisclosed compounding pharmacies

<https://bit.ly/4asDJSR>

How long before Hims & Hers introduces a med to unwrinkle 'Wegovy Face.'

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Why Are Elite Athletes Prone to Abnormal Heart Rhythms?



Elite rowers are joining new research on atrial fibrillation, and there are early hints some have an especially high risk of the condition.

Mark Nolan/Getty Images

Studying cardiac effects of extreme exercise could yield clues to atrial fibrillation

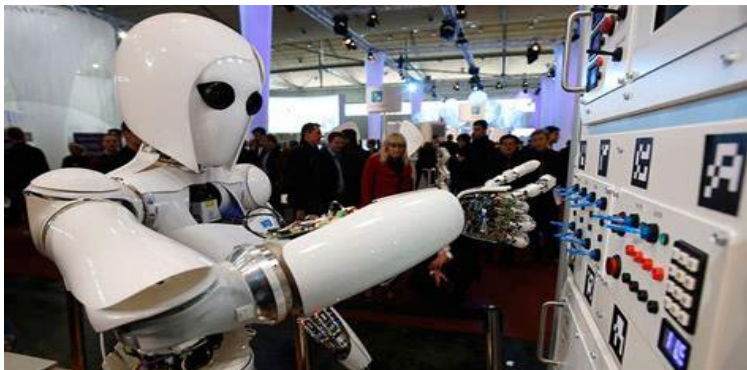
Most AF patients are older than 65 and have known risk factors, particularly high blood pressure, obesity, and sleep apnea. Why cyclists, runners, and other athletes in otherwise impeccable health are sometimes at risk is poorly understood, and could involve both genetic factors and exercise-related remodeling of the heart and its electrical rhythms. La Gerche and others are now studying this paradox. Not only could such work help affected athletes, but it also offers the chance to study AF without the confounding effects of other health concerns, says exercise physiologist Jack Goodman of the University of Toronto.

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What Computer Vision Models Reveal About Human Brains

AI models designed to identify objects offer surprising clues about how we see and how we learn.



AI can now identify objects it hasn't seen before.

rt.com

These models weren't designed to predict brains, they were designed to take in images and tell us what's there. But when they zoomed in to examine the models' stages of processing, scientists realized that computers were learning to recognize features in much the same way humans do, using layers of neurons. Vision scientists started comparing brain and computer responses to the same images, discovering that the models could actually be used to predict how brains function.

<https://bit.ly/3yiqOWe>

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The Most Popular Baby Names of 2023

Rank	Boys	Girls
1	Liam	Olivia
2	Noah	Emma
3	Oliver	Charlotte
4	James	Amelia
5	Elijah	Sophia
6	Mateo	Mia
7	Theodore	Isabella
8	Henry	Ava
9	Lucas	Evelyn
10	William	Luna

Source: Social Security Administration

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Are E-Cargo Bikes the Future of Delivery?

It's hard to fathom that there was once a time before online ordering and home delivery.

So many of us are reliant on the convenience: USPS alone ships an estimated 23.8m packages a day — that's 275.5 packages every second — and the average American received 20 packages via USPS in 2022.

All those packages mean tons of delivery trucks taking to, and sometimes clogging up, our streets. To solve the problem, companies around the world have been testing e-cargo bikes as a solution:



FedEx introduced e-cargo bikes for some UK deliveries back in 2021, and rolled out updated models this year that can carry ~375 pounds over 45+ miles with one battery charge. The company said that 100% of newly added vehicles will be electric by 2030.

DHL trialed e-cargo bike deliveries in Edinburgh in 2021, and has since rolled out bicycle delivery in other cities with the goal of being carbon neutral by 2050.

Amazon UK opened delivery hubs in London and Manchester in 2022 for e-cargo bike and walking deliveries as part of its \$359m investment toward electrification and decarbonization.

And cities themselves are taking action: Manchester, England, made 26 e-cargo bikes and six trailers available to city businesses and residents in 2022 through a \$217.7k grant program.

Most recently...

... New York City — which sees ~2.4m-3.7m packages delivered every day — unveiled Cargi B, its first Department of Transportation e-cargo bike, per Curbed.

DOT also formalized rules for e-cargo bikes in March: Bikes have a speed limit of 15 mph, can never idle on the sidewalk, and can't exceed 16 feet in length.

It comes at a serendipitous time for companies. NYC congestion pricing goes into effect June 30, saddling trucks with \$24-\$36 in daily fees to enter below 60th Street in Manhattan. E-cargo bikes could potentially save companies ~\$13k a year.

The extra mile

The last-mile delivery space is a crowded one because the stakes are so high: Getting packages from a central warehouse to a customer's home accounts for as much as 50% of total carbon emissions from deliveries.

E-cargo bikes might need to get in line to be the darlings of deliveries — autonomous vehicles and drones have been vying for that title.

Although, the AV rollout has not been a flawless one. Neither has the drone idea, come to think of it. So e-cargo bikes might just have a chance to pull ahead.

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Reusable 3D Printed Origami Coffee Cup Flattens for Carrying



mossandfog

3D printed from a silicone material; the cup has an origami-style design that folds entirely flat for easy use. The hard lid keeps the design in place while drinking. When you're done using it, the cup beautifully folds in on itself, and nests inside the lid, making it super simple to carry and store.

<https://bit.ly/3wvbkQy>

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Chords & Riffs

From Jimi Hendrix to The Rolling Stones: The 10 Best Concert Setlists of All Time



Credits: Far Out / Alamy / Bent Rej

History is littered with hundreds of moments that we can look back on and think, "God, I wish I was there". As music fans or general culture fiends, that feeling hits harder than ever when thinking back on the wealth of incredible albums and films made or the artists that lived and died before our time. When it comes to concerts especially, the heart aches for all the iconic stage moments that went down in decades past.

<https://bit.ly/3V1n1FC>

To tell the truth, I have Vietnam to thank for shielding me from most of these.

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How Granny Gets Out of a Speeding Ticket



upliftingtoday

<https://youtu.be/1ToiZEzWwN8>

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Bulldog Brothers Eat Sleep and Breathe Skateboarding



huffingtonpost

<https://youtu.be/tw0ySJasNPk>

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Just friends



datingsitesreview

Dating apps are, increasingly, for the olds. And that means the companies behind them are working harder than ever to reinvent themselves, to the extent that some don't even really want to be dating apps anymore – or, at least, not just dating apps.

“We will not be a dating app in a few years,” Bumble Inc. founder Whitney Wolfe Herd said at the Bloomberg Tech conference last week. “Dating will be a component, but we will be a true human connection platform. This is where you will meet anyone that you want to meet. A hiking buddy, a mahjong buddy.”

In her telling, this is a response to what she deems a loneliness epidemic. But there are cold, hard business reasons too. Sales growth at Bumble is expected to slow to 9% this year, down from a peak of 31% in 2021. Explaining to investors that you're going to be more than just a dating app – neatly expanding your total addressable market – isn't a bad idea. Actually making that happen is, however, a different proposition entirely. Bumble is also making the well-publicized change of not forcing women to make the first move, which was long its unique selling point. A cynical interpretation of that is that it's a simple way to boost user engagement.

It's a similar story at Match Group Inc., the owner of Tinder and Hinge. It predicted sales in the three months through June of as much as \$860 million – less than the \$882 million that analysts were expecting. Tinder was the main underperformer. The challenge with dating apps is that, if they work effectively, you lose your customers. So you have to spend money on marketing to attract new users. And Gen Z seems to be somewhat less enamored with dating apps than millennials, so Tinder's increased spending on sales and marketing didn't deliver the results that many expected. The number of people paying to use Tinder (for the premium services such as Super Likes) and the rest of the company's apps has fallen to 14.9 million, down from a 2022 peak of 16.5 million.

You might expect 20-somethings to be the prime market for dating apps. But a survey published by Statista last year found that 61% of dating app users in the US were ages 30 to 49. Just 26% were 18- to 29-year-olds.

The upshot of all of this – from a financial perspective – is that the dating app companies’ valuations have plummeted. Match Group is now valued at just \$8 billion, down from a pandemic era peak of about \$50 billion. Bumble has just nudged higher than \$2 billion, from its own high of \$20 billion in 2021.

The one exception is Grindr Inc., the app geared toward the LGBTQ+ community. After initially falling from the spike it enjoyed when it went public through a blank check company in 2022, its share price has steadily climbed to give it a \$1.8 billion valuation. That’s even as it has courted controversy: Grindr is being sued by users in the UK for sharing sensitive personal information, including their HIV status, with advertising companies.

The reason for Grindr’s relative success is that it has a lot more headroom for growth. It has just 13 million active users, and a lower number of paying users. As far as its management is concerned, there are plenty more fish in the sea.—Alex Webb

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Wingsuiters Fly Through Tower Bridge at 153 mph.



Red Bull

Marco Fürst and Marco Waltenspiel just became the first people to wingsuit through London's defining landmark. This is how they did it...

<https://bit.ly/4alvIir>

Do this enough times and you get a top spot on the Darwin Awards list.

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Weed



bigstockphoto.com

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Smoke Weed Recreationally? Here's What You Should Know.



A customer smokes while waiting in line outside the Housing Works Cannabis Co. on the first day of legal recreational marijuana sales in New York, U.S.

Photograph By Jeenah Moon, Bloomberg/Getty Images

Today's cannabis strains are not your grandma's weed—and they may be impacting your mental health, heart health, and more.

By Meryl Davids Landau for National Geographic

Some 23 states and the District of Columbia have legalized recreational cannabis in recent years, and others, including Florida, will vote to do so in November. This changing landscape has led to a dramatic rise in consumption, with some 62 million Americans using cannabis in 2023. But legalization of cannabis doesn't mean that regular consumption is completely safe.

A growing body of evidence has documented an array of health concerns beyond just dry mouth and fatigue and includes both mental and physical illnesses. One recent study even [links cannabis consumption to heart disease](#).

“People think about Bob Marley when they think about cannabis. They think it’s natural, it’s Mother Nature, that it’s not going to do any harm,” says Marco Solmi, a psychiatrist at the University of Ottawa. Yet his review of the substance published in the BMJ found [numerous potential problems](#).

Cannabis isn’t dangerous in the same way opioids are, says Deborah Hasin, an epidemiologist at Columbia University who has researched cannabis use and abuse. “People don’t die from cannabis overdose,” she says. “But it can have a lot of other consequences to both physical and psychological health.”

Stronger strains abound

The gloved hand, sticky with flower resin, cradles a flower bud of a strain called Blueberry Cheesecake.

Some of the problems can be attributed to the [stronger strains](#) now available. As Maria Rahmandar, medical director of the substance use and prevention program at Chicago’s Lurie Children’s Hospital, put it at a recent discussion of cannabis at the National Academies of Sciences, Engineering, and Medicine, today’s products are “not your grandmother’s weed.”

“These products are much more potent and come in so many different formulations, that it’s very different from those in the sixties and even the nineties,” Rahmandar says.

The way people consume cannabis today increases the amount of the active ingredient, tetrahydrocannabinol (THC), they ingest. Vaping and edibles generally deliver higher quantities than rolling and smoking joints does, Rahmandar says.

Psychological distress a significant problem

One of the lesser-known but troublesome risks of regular cannabis use is substance-abuse psychosis, where a person has delusions or paranoia, hears voices, and otherwise temporarily loses touch with reality. The psychosis generally resolves within a few days, but in some cases requires hospitalization.

This condition can occur with any psychologically altering substances, but the risk from cannabis is higher even than from cocaine, Solmi says.

“You’re more likely to develop substance-abuse psychosis if you use cannabis daily, but I cannot tell you there’s a safe amount that would prevent this,” he says. Young adults and males are the most prone.

Especially worrisome, up to a third of people who experience substance-abuse psychosis go on to develop the more permanent condition of schizophrenia, Solmi says.

(Schizophrenia in women is widely misunderstood—and misdiagnosed)

Observational studies also connect other mental-health conditions to frequent cannabis use. Solmi's review found that depression increases, as does violence among dating couples. And since cannabis causes cognitive impairment—as well as visual impairment—car accidents have risen among users who drive while under the influence.

Experts especially worry about the mental health impacts for teenagers. Some [17 percent of tenth graders report using cannabis](#), even though no state has legalized the drug for anyone under 21.

[Adolescents are 37 percent more likely to develop depression](#) by young adulthood if they regularly use cannabis compared to non-users. Rates of suicide are also higher.

“Teenage brains are going through a time of maturity and pruning, so when substances are put in there, they have more of an influence than they do on adult brains,” Rahmandar says.

Cannabis harms the heart

Regular use of cannabis can also lead to significant physical problems.

People who use the drug regularly have a higher risk for heart attack, stroke, and other heart disease, according to a large population-based study published in the [Journal of the American Heart Association in February](#). Heart attack rates rose 25 percent while stroke increased 42 percent in this group, the researchers found.

This likely occurs because THC affects blood flow in the arteries and because receptors for cannabinoids exist throughout the cardiovascular system, the authors state. People who smoke their weed also boost their heart disease risk from the particulate matter they inhale alongside the THC.

Other studies have linked cannabis with improving nausea and vomiting after chemotherapy, but the BMJ review found regular users can actually suffer from an extended vomiting condition known as [hyperemesis](#). “This is rare, but it’s increasing as more people use the drug,” Hasin says.

Pregnant women who use cannabis regularly are more likely to have preterm births and dangerously small babies. More research is needed to determine whether this results from the drug itself or from other lifestyle factors among those who choose to use cannabis while they are pregnant, Solmi says.

Cannabis addiction is a concern

Many people perceive cannabis to be safer than alcohol, but one in five cannabis users develop an addiction to the drug. Symptoms of cannabis use disorder are like those for other substances.

"If people experience cravings, feel they need more and more to get the same effects, they've had unsuccessful attempts to quit or cut down," or have any of several other symptoms "that's a warning," Hasin says.

As with alcohol, cannabis addiction can lead to personal, financial, legal, and health problems.

Certain groups are at particularly heightened risk for this addiction. Rates in veterans have increased substantially since 2005, Hasin found in her research. She attributes this to a combination of increased potency and greater acceptance of the drug from its legal status, as well as the likely use of cannabis to self-medicate chronic pain and psychiatric disorders. "The VA has done a good job of reducing unnecessary prescribing of opioids in veterans, so some of them might be turning to cannabis," she says.

[\(Is pain relief from cannabis all in your head?\)](#)

Young people are also at risk for developing this disorder. Youth who begin using the drug at earlier ages or who have a family history of addiction especially heighten their odds for trouble.

"[People younger than 25](#) should avoid cannabis altogether," Solmi says. "They have no idea how they will react to cannabis. You're gambling with your brain and your health."

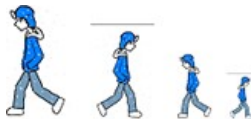
For everyone else, moderation is key.

"This isn't a benign substance that has no risk," Rahmandar says. "Most users will be fine, but we can't predict who will develop problems."

This seems pretty convincing, but politicians don't seem to take the subject seriously. Maybe they need to do some research before they troll for millennial votes.

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My Walking Thoughts



For Sunday June 2 2024

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Ground School at Whiting Field

Classroom work was designed to correspond to the flight syllabus, only it didn't work that way while I was there. The jet basic training at Meridian, MS had come to an abrupt halt in the Spring of 1960. If memory serves me correctly the culprit was a wing spar problem in the T-2B Buckeye trainer, which effectively doubled the production

demand on the T-28 pipeline. As a result, I and my classmates were put into fast-track mode to whittle the program down from 20 weeks to 15 or perhaps 14...in fact often less than that.

While ground school remained stable at 12 weeks, the accelerated flight syllabus meant that in many cases some of us completed the airborne work before the classwork was done. Case in point, I had finished the flight portion and moved back to Saufley to prepare for carrier qualification, leaving behind two weeks of classroom lectures on ordnance delivery.

Anyway, back to the start of ground school.

I had expected to be led out to the flightline to get a firsthand look at the Navy's version of North American's T-28 B or C, ruggedized two-place trainers sporting a 1,425 hp Wright R-1820-86 radial engine driving a three-bladed propeller and fitted with a belly-mounted speed brake. The C version differed from the B with the addition of a tailhook, shortened propeller blades, and a few knickknacks to make it suitable for carrier ops, but for the purposes of student training their performances were indistinguishable.

Instead, however, ground school began in a classroom filled with different carriage-mounted oversized displays of features and performance characteristics of the aircraft that provided the backdrop the first two weeks—the get yourself ready to fly the bird portion—of the program.

It was a mind-bending tour of aircraft systems that were a far cry from those to which we had been introduced back at Saufley Field. It began with a broadbrush look the entire bird, followed by detailed inspections of each of its salient systems—powerplant and propeller, hydraulics, electrics, communications and navigation systems, flight control surfaces, and all the gauges, switches, circuit breakers that turned what began life as a large enclosure into a seriously crowded cockpit.

All but one of the instructors were civilians, considerably more professional both in knowledge and teaching skills than what we previously had been exposed to in either preflight or primary, the difference as if to say to us, "Okay you Dilberts, we're done with the sandlot stuff, this is for real." So real that after eight to 10 hours in the classroom each day, after dinner I found myself reviewing the tech manuals along with my notes from the day and then getting a head start on the next day's subject matter. I barely noticed that my lovesick roommate was gone, replaced by a Coast Guard lieutenant who would be in the class following mine.

Systems studies complete, next came operating procedures followed by immersion in emergency procedures covering everything from electrical glitches to how to deal with the biggies like engine loss or fire. It was here that we sat in a photograph laden cardboard copy of the cockpit where we rehearsed ad infinitum the various "Oh my

Gosh” situations that had me halfway convinced that the T-28 itself was not a flying machine but an emergency just waiting to happen.¹

Though it seemed the end of the second week would never come, we arrived after lunch on a hot afternoon to find the classroom filled with a dozen or so flight suited instructors, eyeballing us just as curiously as we did them. No doubt anxious to get us out of his hair, our ground school instructor began reading off names, indicating the person to whom we should report. As usual we were dealt with alphabetically, so by the time my name was called, only Tom Williams remained, and both of us were assigned to Lieutenant Winans, a wiry man of indeterminant age who looked as if he had just posed as the Marlboro Man.

The three of us shook hands sizing each other up, then with a genuine smile that said wonders of what was to come, our mentor clapped Tom and me on the back and said, “Let’s get the hell out of here and go introduce you to the bird.”



You betcha, Kemosabe.

¹ *[I would like to point out two things that stand out in retrospect: one that I was ready right from the git-go to show the bird I could dish out whatever remedy was required, and two, that in the 105 hours I was to fly the Trojan, I never encountered a single flight safety situation.]*

Forgetting for the moment the ten more weeks of ground school awaiting me, I reveled in the realization that tomorrow (a Saturday)...or perhaps not until Monday, I would put what I had learned to use.

Next week. At the helm of the Trojan that Launched 1,000 Aviation Careers.

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